

REMARKS

Claims 1-20 remain in this application for further consideration in light of the foregoing remarks. No new matter has been added.

I. Rejection of Claims 1-20 Under 35 U.S.C. 102(b)

Claims 1-20 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,802,371 issued to Meier (hereinafter "Meier"). Even though applicants respectfully disagree with the rejection, claims 1, 4, 11, 15, 19 and 20 have been amended for clarification in hopes of expediting this matter.

Applicants' amended independent claim 1 specifically recites the following elements that are not taught or suggested by the Meier reference:

"an unwind rewriter programmed to reorder the first plurality of blocks of metadata to generate a second plurality of blocks of metadata having a second order, wherein the first plurality of blocks are reordered in response to a modification of the sequence of binary instructions within a procedure, such that the second plurality of blocks of metadata accurately represents the modified sequence of binary instructions." (Emphasis added).

Applicants' amended independent claim 4 specifically recites the following elements that are not taught or suggested by the Meier reference:

"regenerating new unwind data, wherein the new unwind data includes a reordering of the original order of basic blocks, and wherein the reordering represents the current order of basic blocks within the modified binary procedure." (Emphasis added).

Applicants' amended independent claim 11 specifically recites the following elements that are not taught or suggested by the Meier reference:

"generating a second group of unwind data, wherein the second group of unwind data includes a reordering of the first group of unwind data, a second unwind table and a second plurality of unwind descriptor records such that the second group of unwind data accurately represents the binary modification to the procedure." (Emphasis added).

Applicants' amended independent claim 15 specifically recites the following elements that are not taught or suggested by the Meier reference:

"a second metadata field associated with a second group of instructions within the first procedure, wherein the first metadata field and the second metadata field accurately reflect a flow of instructions of the basic blocks in the second order, *and wherein the flow of instructions of the basic blocks in the second order includes a reordering of a flow of instructions of the basic blocks in the first order.*" (Emphasis added).

Applicants' amended independent claim 19 specifically recites the following elements that are not taught or suggested by the Meier reference:

"generating a second group of unwind data, *wherein the second group of unwind data includes a reordering of the first group of unwind data*, a second unwind table and a second plurality of unwind descriptor records such that the second group of unwind data accurately represents the binary modification to the procedure." (Emphasis added).

Applicants' amended claim 20 specifically recites the following elements that are not taught or suggested by the Meier reference:

"regenerating new unwind data, *wherein the new unwind data includes a reordering of the original order of basic blocks, and wherein the reordering represents the current order of basic blocks within the modified binary procedure*" (Emphasis added).

The cited reference does not teach all of the limitations that are recited in applicants' independent claims 1, 4, 11, 15, 19 and 20. Moreover, the Meier reference does not teach or otherwise suggest any of the limitations set forth above. Instead, Meier addresses the problems associated with debugging distributed programs. (See Meier at col. 2, lines 34-40). As defined in Meier, a distributed program may include client-server or peer-to-peer applications. (See Meier at col. 1, lines 34-40). Meier teaches "a method of, and system for, determining the call relations of a distributed program without the performance overhead of recording relations in a table." (See Meier at col. 2, lines 18-23). Generally, Meier teaches that "a user may wish to debug the distributed set of client-server programs as if they were on a single program." (See Meier at col. 2, lines 18-23). Meier continues by teaching that "[t]he present invention meets this need by providing a *distributed call stack*, wherein the call stacks of the client and server

programs are *appended together to form a single distributed call stack.*" (See Meier at col. 4, line 66 - col. 5, line 2).

Column 2 of Meier does not teach the aforementioned limitations of the present invention as suggested in the Office Action. Column 2 of Meier is a summary that specifically recites, in pertinent part, as follows:

"For example, when a breakpoint is encountered in an RPC server program while using a debugger for distributed programs, the *call stacks* for the client and server program are *appended together* into a *single distributed call stack*. In the case of nested RPC calls (e.g. program A executes an RPC call to program B which executes an RPC call to C and so on) all of the *call stacks are appended together* in the order they were created. The distributed call stack may span many programs, threads of execution, and computing machines.

The *distributed call stack may be used to select a routine from the call stack when setting a context for a tool that displays program state information.* For example, when the user selects a particular routine from the distributed call stack, the source listing, variables that are currently in scope, and thread executing the routine may be shown in various display windows." (See Meier at col. 2, lines 31-47). (Emphasis added).

Succinctly stated, Meier teaches splicing together a *call stack* from a client and a *call stack* from a server. As recited in claim 1, Meier does not teach reordering "the first plurality of blocks of metadata to generate a second plurality of blocks of metadata having a second order." As recited in claim 4, Meier does not teach "wherein the new unwind data includes a reordering of the original order of basic blocks." Moreover, Meier fails to teach "wherein the second group of unwind data includes a reordering of the first group of unwind data, a second unwind table and a second plurality of unwind descriptor records such that the second group of unwind data accurately represents the binary modification to the procedure", as recited in claim 11. Meier also fails to teach "wherein the flow of instructions of the basic blocks in the second order includes a reordering of a flow of instructions of the basic blocks in the first order", as recited in claim 15. Claim 19 specifically recites "generating a second group of unwind data, wherein the second group of unwind data includes a reordering of the first group of unwind data, a second unwind table and a second plurality of unwind descriptor records such that the second group of unwind data accurately represents the binary modification to the procedure", which is not taught by Meier. Furthermore, Meier fails to teach "regenerating new unwind data, wherein the new

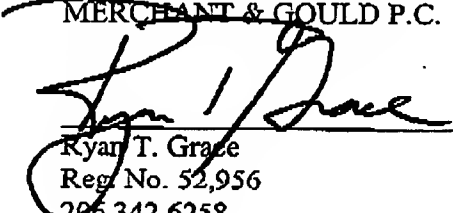
unwind data includes a reordering of the original order of basic blocks", as recited in claim 20. Accordingly, independent claims 4, 11, 15, 19 and 20 are clearly allowable under 35 U.S.C. §102(b).

Regarding claims 2-3, 5-10, 12-14 and 16-18, applicants assert that the limitations of those claims are not taught or otherwise suggested by the cited art. Moreover, claims 2-3, 5-10, 12-14 and 16-18 ultimately depend from independent claims 4, 11, 15, 19 and 20, respectively. Claims 4, 11, 15, 19 and 20 are clearly allowable as more fully stated above. Accordingly, applicants assert that claims 2-3, 5-10, 12-14 and 16-18 are also allowable for at least those same reasons.

In view of the foregoing, applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

MERCHANT & GOULD P.C.


Ryan T. Grace
Reg. No. 52,956
206.342.6258

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903

27488

PATENT TRADEMARK OFFICE